

REMARKS

The undersigned appreciates the courtesies extended during the interview of October 14, 2004.

Claims 36, 37, 41-46 and 50-53 stand rejected under 35 U.S.C. § 102(b) for anticipation by U.S. Patent No. 4,789,475 to Harte et al. Claims 38 and 47 stand rejected under 35 U.S.C. § 103(a) for obviousness over Harte in view of U.S. Patent No. 5,437,845 to Brioni et al. Claims 39, 40, 48 and 49 stand rejected under 35 U.S.C. § 103(a) for obviousness over Harte in view of U.S. Patent No. 6,436,294 to Lundquist.

The basis for these rejections is that the Harte patent teaches a process for removing heavy metals from water by using an activated carbon composition that includes chelating agents thereon, the chelating agents having some acid functionality. The Brioni patent is relied upon for disclosing various types of activated carbon. The Lundquist patent is relied upon for supposedly describing the equivalence of the acid functional chelating agents of Harte with particular simple carboxylic acids.

The Harte patent only considers using chelating agents to remove heavy metals from contaminated water. There is no consideration given to the need to control pH during the start-up of a water treatment process. Moreover, the Harte process is not capable of being used to practice the present invention, namely to control the pH during start-up of a water treatment process by using an activated carbon composition onto which a carboxylic acid is adsorbed.

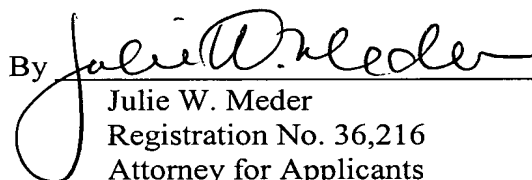
A Declaration Under 37 C.F.R. §1.132 is submitted herewith comparing the pH of water exiting beds of activated carbon treated with a carboxylic acid of the present invention (citric acid) and a chelating agent of Harte (EDTA). The tests were conducted with two carbon sources, bituminous coal and coconut shell. As detailed in the Declaration, both types of carbon beds treated with citric acid exhibited a pH change of less than 1pH unit, while both types of carbon beds treated with EDTA were incapable of maintaining an outflow pH of plus or minus 1 unit. The pH rise exhibited using activated carbon beds treated with a chelating agent of the Harte patent is unacceptable. Thus, even though the chelating agent of the Harte patent has some acid functionality, it cannot control pH as is required by the pending claims. Therefore, claims 36, 37, 41-46 and 50-53 define thereover.

The secondary references do not account for the deficiencies of the Harte patent. In the absence of some motivation in Harte to practice a method of controlling pH in a water treatment process using an activated carbon composition, the teachings of the Brioni and Lundquist patents are not combinable therewith. As noted above, Brioni adds nothing beyond teaching carbon sources for producing activated carbon. The asserted opportunity to substitute the chelating agents of Harte with the acids of Lundquist does not make such a combination of teachings appropriate in the absence of some motivation to do so. MPEP 2143. Since the compositions disclosed in Harte do not exhibit the properties of the claimed process, there can be no motivation to substitute the acids of Lundquist for those of Harte. Accordingly, claims 38-40, and 47-49 are likewise patentable over the prior art.

In view of the foregoing, claims 36-53 are believed to define over the prior art of record and be in condition for allowance.

Respectfully submitted,

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